

Determination of Optimum Conditions for Reproducing Information in Optical Echo Processors

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Abstract

We consider correlations between the temporal profile of stimulated photon echo and the temporal form of the object laser pulse. We find that the information measure is a good criterion in choosing optimum conditions for reproducing information in optical echo processors. We show that the reproducibility of information in the stimulated photon-echo response in this regime depends on the object-pulse area. © 2013 Springer Science+Business Media New York.

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Keywords

echo processor, information entropy, information measure, photon echo